

1159,264



## PATENT SPECIFICATION

DRAWINGS ATTACHED

1.159,264

Inventor: MARK EDWARD HOPLEY

Date of filing Complete Specification: 8 Sept., 1967.

Application Date: 13 Sept., 1966.

No. 40862/66.

Complete Specification Published: 23 July, 1969.

© Crown Copyright 1969.

Index at acceptance:—H2 E(7A1, 21)

Int. Cl.:—H 01 r 3/04

BEST AVAILABLE COPY

## COMPLETE SPECIFICATION

## Improvements relating to Conduit Boxes and Earthing means therefor

We, CROWN FITTINGS (WALSALL) LIMITED, a British Company of Leamore Lane, Leamore, Walsall, in the County of Stafford, do hereby declare the invention for which we pray  
 5 a Patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to conduit boxes and earthing means therefor.

In electrical installations the earthing of conduit boxes is often effected by means of conduits attached thereto. In certain circumstances, however, this is undesirable and an  
 15 additional earthing means is required.

It is an object of the present invention to provide an earthing means for a conduit box which is simple and inexpensive.

According to the present invention earthing means for a conduit box comprises an electrically conducting spacer adapted to be sandwiched between a conduit box body and a closure member therefor, and an earthing extension from the spacer for connection to an  
 20 earthing wire.

Preferably the earthing extension extends from the spacer substantially perpendicular to the general plane of the spacer. If desired the spacer may include lugs having apertures to correspond with apertures in the body which receive the fixing screws by means of which the closure member is retained on the body.

A preferred embodiment of the invention is hereinafter particularly described with reference to the accompanying drawings in which:—

FIGURE 1 is a perspective view of an earthing means according to the invention, and

FIGURE 2 is a cross-section of a conduit box with the earthing means in position.

The earthing means is intended for use with a cylindrical conduit box having a circular closure member, and comprises a spacer composed of a generally annular metal lamina  
 45 of the same external diameter as that of the

conduit box 11. Two diametrically opposite annularly extending lugs 12 are provided integral with the annulus 10 to correspond with bosses 13 provided on the internal walls of the box 11. These lugs are apertured at 14  
 50 in order that fixing screws 15 for the closure member 26 may pass through them and into the bosses 13 in the box.

The earthing extension is a strip 16 of "L" section formed integrally with the annulus 10  
 55 and extending from the annulus substantially perpendicular to the general plane of the latter so as to lie along one side of the conduit box. The length of the strip is such that the arm 17 of the "L" remote from the annulus is  
 60 closely parallel with the base of the box 11.

On the upper surface of the arm 17 there is a brass wire-fixing attachment 18, the attachment having an aperture 19 in which an earthing wire may be inserted, said aperture  
 65 communicating with a threaded aperture perpendicular thereto which can receive a retaining screw 20 for holding the earthing wire in position.

The chain dotted lines 21 indicate a possible position for conductor connecting means, the conductors being led to the box 11 via the cylindrical apertures 22 and 23.

The earthing means of the present invention provides a very simple way of earthing conduit boxes when it is desired to do so. It is not  
 75 necessary to modify the box in any way so that the additional expense of earthing of the box need only be incurred when the earthing facility is required.

## WHAT WE CLAIM IS:—

1. Earthing means for a conduit box comprising an electrically conducting spacer adapted to be sandwiched between a conduit box  
 85 body and a closure member therefor, and an earthing extension from the spacer for connection to an earthing wire.

2. Earthing means according to Claim 1 in which the earthing extension extends from the  
 90

spacer substantially perpendicular to the general plane of the spacer.

3. Earthing means according to Claim 2 in which the earthing extension is of "L" shape, the arm thereof remote from the spacer carrying wire attachment means.

4. Earthing means according to any of Claims 1 to 3 in which the spacer includes a pair of apertured lugs to co-operate with apertures in a conduit box.

5. Earthing means for a conduit box substantially as herein described with reference to, and as shown in, the accompanying drawings.

6. A conduit box incorporating earthing means as claimed in any of Claims 1 to 5.

15

For the Applicants  
GEORGE FUERY & CO.  
St. Martin's House, Bull Ring,  
Birmingham, 5.  
Chartered Patent Agents.

Printed for Her Majesty's Stationery Office by the Courier Press, Leamington Spa, 1969.  
Published by the Patent Office, 25 Southampton Buildings, London, W.C.2, from which  
copies may be obtained.

1159264

COMPLETE SPECIFICATION

1 SHEET

*This drawing is a reproduction of the Original on a reduced scale*

